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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,456	11/21/2003	Susumu Fujioka	244641US2CONT	8050
22850 7590 05/22/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER FATAHI YAR, MAHMOUD	
			ART UNIT 2629	PAPER NUMBER
			NOTIFICATION DATE 05/22/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/717,456

Applicant(s)

FUJIOKA, SUSUMU

Examiner

Mike Fatahiyar

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2/12/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iura et al(5,617,312) in view of Dunthorn(5,317,140).

Iura et al disclose a method and an apparatus for inputting information including coordinate data comprising a camera(100) mounted on top of a display device(202), an object extracting device(106) for extracting a predetermined object and recognizing the shape of the predetermined object(column 3, lines 59-67), a motion detector device(107) for detecting a motion of the predetermined object(column 4, lines 32-65) and for determining whether to input a predetermined information(column 5, lines 1-9).

In claims 1, 3 and 5, as to the limitation "determining whether the predetermined object is within a predetermined distance from the display", such is also inherently the case in Iura et al because their system like the presently claimed inventions use camera having an extracting feature for determining a predetermined object above the plane of the display. Iura et al substantially show all the feature of the above claims except for the "providing at least two cameras located at respective corners of a display" and "calculating angles of views of each of the at least two cameras for calculating the

coordinates of the predetermined object". However, Donthorn is cited to show that the concept of utilizing at least two cameras located at respective corners of a display device(column 6, lines 5-37; column 7, lines 6-54) for determining a position of an object based on the viewing angles of the cameras(i.e., triangulation; column 7, lines 18-38). Thus, it would have been obvious to one of ordinary skill in the art to modify the system of Iura et al with the above noted teachings of Dunthorn such that to provide two cameras at respective corners of the display device (202) for determining the position of the object based on the viewing angles of the cameras because both references are related to determination of the position of an object based on feature extraction of the object by utilizing cameras.

3. Applicant's arguments filed 1/19/07 have been fully considered but they are not persuasive. Applicant in his remarks has argued that "Iura et al utilize the front facing camera(100) to look at the motion of a person, but in Iura a motion relative to a plane of a display is completely irrelevant. Therefore, Iura does not disclose or suggest, and actually teaches away from, determining whether the predetermined object is within a predetermined distance from the plane of the display". As pointed out above, such is inherently also the case in Iura et al because their system like the presently claimed inventions use camera having an extracting feature for determining the location of a predetermined object(e.g., finger or pen) above the plane of the display, as opposed to conventional scanning light beams or acoustic waves touch panels which require detection of an actual touchdown on the display. Thus, the touch detection system of


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lura et al like the presently claimed inventions determine the location of a predetermined object within a predetermined distance above the plane of the display device.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Fatahiyar whose telephone number is (571)272-7688. The examiner can normally be reached on Monday-Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

MF
M. Fatahiyar
May 11, 2007